IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES (Attorney Docket No. 16055US01)

In the Application of: Ling Su, et al.

Electronically filed on July 20, 2009

Serial No. 10/810,998

Filed: March 26, 2004

For: COLLABORATIVE COEXISTENCE

WITH DYNAMIC PRIORITIZATION

OF WIRELESS DEVICES

Examiner: Matthew C. Sams

Group Art Unit: 2617

Confirmation No. 8997

APPEAL BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an appeal from an Office Action dated February 24, 2009 ("Final Office Action"), in which claims 42-71 were finally rejected. The Appellant respectfully requests that the Board of Patent Appeals and Interferences ("Board") reverses the final rejection of claims 42-71 of the present application. The Appellant notes that this Appeal Brief is timely filed within the period for reply that ends on July 20, 2009.

REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

Broadcom Corporation, a corporation organized under the laws of the state of California, and having a place of business at 5300 California Avenue, Irvine, California 92617, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment recorded at Reel 015159, Frame 0341 in the PTO Assignment Search room.

RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

The Appellant is unaware of any related appeals or interferences.

STATUS OF THE CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))

The present application includes claims 42-71, all of which stand rejected under 35 U.S.C. 103(a). See the Final Office Action at page 4. Claims 1-70 were previously cancelled. The Appellant identifies claims 42-71 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

The Appellant has not amended any claims subsequent to the final rejection of claims 42-71 mailed on May 29, 2009.

SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

Independent claim 42 discloses the following:

A method for communication, the method comprising:

in a chip comprising a plurality of wireless transmitter and/or receiver devices¹,

generating two or more priority signals² to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices within said chip³; and

coordinating communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals⁴.

Independent claim 57 discloses the following:

A system for communication, the system comprising:

at least one circuitry for use in a chip comprising a plurality of wireless transmitter and/or receiver devices⁵, said at least one circuitry generates two or more priority signals⁶ to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices within said chip⁷; and

said at least one circuitry coordinates communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring

¹ See present specification, e.g., at page 8, line 3 – page 9, line 17; Fig. 2 illustrates such a chip (wireless interface devices 57 and 59).

² See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 (multi-priority control signals 29).

³ See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 (wireless interface device designated by dashed line).

⁴ See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 (the MAC layers of devices 57 and 59 communicate with each other based on the multi-priority control signals to avoid concurrent transmission/reception).

⁵ See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 illustrates such a chip (wireless interface devices 57 and 59).

⁶ See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 (multi-priority control signals 29).

⁷ See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 (wireless interface device designated by dashed line).

one or more of said corresponding MAC interface devices via said generated two or more priority control signals⁸.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Claims 42, 43, 45, 47-53, 55-58, 60, 62-68, 70, and 71 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USP 6,978,121 ("Lane") in view of USPP 2004/0029619 ("Liang"). Claims 44 and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang, further in view of USP 6799054 ("Shpak"). Claims 46 and 61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang, further in view of USPP 20030161288 ("Unruh"). Claims 54 and 69 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang, further in view of USPP 20040009751 ("Michaelis").

⁸ See id., e.g., at page 8, line 3 – page 9, line 17; Fig. 2 (the MAC layers of devices 57 and 59 communicate with each other based on the multi-priority control signals to avoid concurrent transmission/reception).

ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

In the Final Office Action, claims 42, 43, 45, 47-53, 55-58, 60, 62-68, 70, and 71 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang. Claims 44 and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang, further in view of Shpak. Claims 46 and 61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang, further in view of Unruh. Claims 54 and 69 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang, further in view of Michaelis.

I. The Proposed Combination of Lane and Liang Does Not Render Claims 42, 43, 45, 47-53, 55-58, 60, 62-68, 70, and 71 Unpatentable

Claims 42, 43, 45, 47-53, 55-58, 60, 62-68, 70, and 71 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lane in view of Liang.

A1. Independent Claims 42 and 57

With regard to the rejection of independent claim 42 under 35 U.S.C. § 103(a), the Appellant submits that the combination of Lane and Liang does not disclose or suggest at least the limitation of "generating two or more priority signals to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices within said chip," as recited by the Appellant in independent claim 42 (emphasis added). The Final Office Action states the following:

Regarding claim 42, Lane teaches a method of communication, the method comprising: a plurality of wireless transmitter and/or receiver

devices, (Fig. 2 [220 & 260]) generating two or more priority signals (Col. 5 lines 16-23) to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices; (Col. 4 lines 39-52) and coordinating communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals. (Col. 4 line 39 through Col. 5 line 51, specifically Col. 4 lines 39-52)

See the Final Office Action at page 4. The Examiner relies on col. 5, lines 16-23 of Lane, which discloses that **prioritization is achieved only via a single command**. More specifically, the BT MAC 130 (FIG. 1 of Lane) transmits **a single transmit disable command** to the 802.11 radio 160, whenever a high-priority receive or transmit event has to be processed. In this regard, Lane does not disclose "generating two or more priority signals to control prioritization of information ...," as recited by the Appellant in independent claim 42. Liang does not overcome the above deficiencies of Lane.

Furthermore with regard to the rejection of independent claim 42 under 35 U.S.C. § 103(a), the Appellant submits that the combination of Lane and Liang does not disclose or suggest at least the limitation of "coordinating communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals," as recited by the Appellant in independent claim 42 (emphasis added). The Final Office Action states the following at page 4:

coordinating communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals. (Col. 4 line 39 through Col. 5 line 51, specifically Col. 4 lines 39-52)

The Examiner relies for support on the same citation of Lane (col. 4, lines 39-52) as already used in reference to the previously argued claim limitation. As already explained above, Lane discloses that prioritization is achieved only via a single command. More specifically, the BT MAC 130 (FIG. 1 of Lane) transmits a single transmit disable command to the 802.11 radio 160, whenever a high-priority receive or transmit event has to be processed. In this regard, Lane does not use two or more priority signals to control prioritization. Therefore, Lane does not (and cannot) disclose any configuring of one or more MAC interface devices via generated two or more priority control signals, as recited in Appellant's claim 1.

As shown above, the combination of Lane and Liang does not teach or suggest "generating two or more priority signals to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices within said chip," as recited by the Appellant in independent claim 42. The combination of Lane and Liang also does not teach or suggest "coordinating communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals," as recited by the Appellant in independent claim 42. Accordingly, the proposed combination of Lane and Liang does not render independent claim 42 unpatentable, and a prima facie case of obviousness has not been established. The Appellant

submits that claim 42 is allowable. Independent claim 57 is similar in many respects to the method disclosed in independent claim 42. Therefore, the Appellant submits that independent claim 57 is also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 42.

A2. Examiner's Response to Arguments

The Examiner states the following in the Final Office Action:

Lane teaches "The MACs ensure that the physical medium (e.g., the 2.4 Ghz frequency band) is shared in a fair, consistent and efficient manner" (Col. 4 lines 42-44), "the MAC controls the contention process and resolves any collisions that may occur" (Col. 4 lines 46-47), "The 802.11 MAC 170 transmits information to the BT MAC 130 regarding the priority of 802.11 events" and " the BT MAC 130 transmits a transmit disable command to the 802.11 radio 160 whenever the BT MAC 130 needs to process a high-priority BT receive or transmit event". (Col. 5 lines 16-23) Therefore, since Lane teaches the MACs ensure that the 2.4 GHz frequency is shared and that any collisions that occur are resolved, it is obvious to one of ordinary skill in the art to recognize that the transmission of the priority of 802.11 events from an 802.11 MAC to a BT MAC and the transmission of a high-priority BT receive or transmit event from a BT MAC to an 802.11 MAC constitute the "generating of two or more priority signals to control prioritization of information between corresponding MAC interfaces".

See the Final Office Action at pages 2-3. Initially, the Appellant points out that the Examiner has not addressed the specific arguments stated in pages 11-12 of the 01/12/2009 response. In the above "Response to Arguments" section, the Examiner is merely re-stating the Lane citations (col. 4 and 5) used in the 09/11/2008 Non-Final Office Action. The Examiner then concludes, without any support whatsoever, that "generating of two or more priority signals to control prioritization of information between

corresponding MAC interfaces" is obvious. Even if Lane teaches collision resolution, the important issue is how such collision resolution is achieved. As explained in the 01/12/2009 response, Lane discloses that prioritization is achieved only via a single command. More specifically, the BT MAC 130 (FIG. 1 of Lane) transmits a single transmit disable command to the 802.11 radio 160, whenever a high-priority receive or transmit event has to be processed. Lane does not use two or more priority signals to control prioritization.

B. Rejection of Dependent Claims 43 and 58

Claims 43 and 58 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 43 and 58 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 43 and 58.

C. Rejection of Dependent Claims 45 and 60

Claims 45 and 60 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 45 and 60 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also submits that the combination of Lane and Liang does not disclose or suggest at least the limitation of "controlling connection time of one or more of said plurality of wireless transmitter and/or receiver via said configuration of

said one or more of said corresponding MAC interface devices," as recited by the Appellant in claim 45.

With regard to claim 45, the Final Office Action states the following at page 5:

Lane in view of Liang teaches controlling connection time of one or more of said plurality of wireless transmitter and/or receiver via said configuration of said one or more of said corresponding MAC interface devices. (Liang [0024] "dynamic balancing based on activity in a given time period" and [0037])

The Final Office Action relies on paragraphs 0024 and 0037 of Liang. Liang, at paragraph 0024, discloses that the priority scheme for transmission by functions 104 and 106 incorporates a fixed or a dynamic bias factor, such as dynamic balancing based on activity in a given time period (since balancing is performed dynamically, there is no controlling of the connection times at the time the MAC interfaces are configured). Liang, at paragraph 0037, discloses that the throughput bias toward either the WLAN or Bluetooth function may be adjusted using a statistical contention scheme. Therefore, Liang, including paragraphs 0024 and 0037, does not specifically disclose controlling the connection time for the transmitter/receiver by configuring the MAC interfaces.

Accordingly, the Appellant submits that claim 45 is allowable over the references cited in the Final Office Action at least for the above reasons. Claim 60 is substantially similar to claim 45 and is, therefore, also allowable based on the above reasoning.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 45 and 60.

D. Rejection of Dependent Claims 47 and 62

Claims 47 and 62 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 47 and 62 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 47 and 62.

E. Rejection of Dependent Claims 48 and 63

Claims 48 and 63 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 48 and 63 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 48 and 63.

F. Rejection of Dependent Claims 49 and 64

Claims 49 and 64 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 49 and 64 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 49 and 64.

G. Rejection of Dependent Claims 50 and 65

Claims 50 and 65 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 50 and 65 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 50 and 65.

H. Rejection of Dependent Claims 51 and 66

Claims 51 and 66 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 51 and 66 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also submits that the combination of Lane and Liang does not disclose or suggest at least the limitation of "assigning first and second priority control signals selected from said two or more priority control signals, to first and second wireless transmitter and/or receiver devices selected from said plurality of wireless transmitter and/or receiver devices," as recited by the Appellant in claim 51.

With regard to claim 51, the Final Office Action states the following at page 6:

Lane in view of Liang teaches assigning first and second priority control signals selected from said two or more priority control signals (Lane Col. 5 lines 16-23 and Liang [0024]), to first and second wireless transmitter and/or receiver devices selected from said plurality of wireless transmitter and/or receiver devices. (Lane Col. 4 lines 39-52 and Liang [0024])

As already explained above, Lane discloses that prioritization is achieved only via a single command. More specifically, the BT MAC 130 (FIG. 1 of Lane) transmits a single

transmit disable command to the 802.11 radio 160, whenever a high-priority receive or transmit event has to be processed. In this regard, Lane does not use two or more priority signals to control prioritization. Therefore, Lane does not (and cannot) disclose any configuring of one or more MAC interface devices via generated two or more priority control signals. In addition, the combination of Lane and Liang does not disclose or suggest any assigning of **first and second priority control signals** selected from two or more priority control signals, to first and second wireless transmitter and/or receiver devices selected from a plurality of wireless transmitter and/or receiver devices, as recited by the Appellant in claim 51. Accordingly, the Appellant submits that claim 51 is allowable over the references cited in the Final Office Action at least for the above reasons. Claim 66 is substantially similar to claim 51 and is, therefore, also allowable based on the above reasoning.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 51 and 66.

I. Rejection of Dependent Claims 52 and 67

Claims 52 and 67 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 52 and 67 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also submits that the combination of Lane and Liang does not disclose or suggest at least the limitation of "receiving or transmitting data on said first of said plurality of wireless transmitter and/or receiver devices in accordance

with the relative priority of said first priority control signal to said second priority control signal," as recited by the Appellant in claim 52.

With regard to claim 52, the Final Office Action states the following at page 6:

Lane in view of Liang teaches receiving or transmitting data on said first of said plurality of wireless transmitter and/or receiver devices (Lane Col. 4 line 64 through Col. 5 lines 23 and Liang [0024]) in accordance with the relative priority of said first priority control signal to said second priority control signal. (Lane Col. 4 line 64 through Col. 5 lines 23 and Col. 5 lines Liang [0024])

As already explained above, Lane discloses that prioritization is achieved only via a single command. More specifically, the BT MAC 130 (FIG. 1 of Lane) transmits a single transmit disable command to the 802.11 radio 160, whenever a high-priority receive or transmit event has to be processed. In this regard, Lane does not use two or more priority signals to control prioritization. Therefore, Lane does not (and cannot) disclose any configuring of one or more MAC interface devices via generated two or more priority control signals. In addition, the combination of Lane and Liang does not disclose or suggest any relative priority of a first priority signal to a second priority signal, or receiving/transmitting data based on such relative priority information, as recited in Appellant's claim 52. Accordingly, the Appellant submits that claim 52 is allowable over the references cited in the Final Office Action at least for the above reasons. Claim 67 is substantially similar to claim 52 and is, therefore, also allowable based on the above reasoning.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 52 and 67.

J. Rejection of Dependent Claims 53 and 68

Claims 53 and 68 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 53 and 68 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 53 and 68.

K. Rejection of Dependent Claims 55 and 70

Claims 55 and 70 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 55 and 70 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 55 and 70.

L. Rejection of Dependent Claims 56 and 71

Claims 56 and 71 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 56 and 71 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also submits that the combination of Lane and Liang does not disclose or suggest at least the limitation of "said first priority control signal comprises a user-specified priority indication for said first of said plurality of wireless transmitter and/or receiver devices, such that said first of said plurality of wireless transmitter and/or receiver devices is given priority in the reception or transmission of

data relative to said first of said plurality of wireless transmitter and/or receiver devices," as recited by the Appellant in claim 56.

With regard to claim 56, the Final Office Action states the following at page 7:

Lane in view of Liang teaches said first priority control signal comprises a user-specified priority indication for said first of said plurality of wireless transmitter and/or receiver devices (Liang [0006] "end-user arbitration"), such that said first of said plurality of wireless transmitter and/or receiver devices is given priority in the reception or transmission of data relative to said first of said plurality of wireless transmitter and/or receiver devices. (Liang 0006]).

Liang, at paragraph 0006, discloses "end-user arbitration", where an end-user would manually switch between different wireless technologies when simultaneous operation is not possible between the different technologies. In this regard, Liang is sufficiently distinguished, since when manual selection between wireless technologies takes place, Liang does not use of two or more priority signals, where a first of these priority signals is a user-specified priority indication. There is simply no need during Liang's end-user arbitration for the use of any priority signals since each of the different wireless technologies operate only individually, when selected by a user (e.g., Liang's paragraph 0006 discloses manual switching from wireless Internet to PDA hot-sync operation). Accordingly, the Appellant submits that claim 56 is allowable over the references cited in the Final Office Action at least for the above reasons. Claim 71 is substantially similar to claim 56 and is, therefore, also allowable based on the above reasoning.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 56 and 71.

II. Rejection of Dependent Claims 44 and 59

Claims 44 and 59 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 44 and 59 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also submits that the combination of Lane, Liang, and Shpak does not disclose or suggest at least the limitation of "controlling latency associated with said communication of information via said configuration of said one or more of said corresponding MAC interface devices," as recited by the Appellant in claim 44.

With regard to claim 44, the Final Office Action states the following at pages 8-9:

Lane in view of Liang teaches the limitations of claim 42 above, but differs from the claimed invention by not explicitly reciting controlling latency associated with said communication of information via said configuration of said one or more of said corresponding MAC interface devices.

In an analogous art, Shpak teaches a method and system for collaboration between wireless access points that includes the ability convey data through a single device via two different media access control (MAC) protocols, wherein the first MAC protocol has a latency that is higher than the second MAC protocol and can be preempted in order to meet the second lower latency of the second MAC protocol. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to implement the wireless system coexistence of Lane in view of Liang after modifying it to incorporate the ability to control latency of Shpak since controlling latency ensures the differing quality of service requirements are met for the different MAC protocols.

Shpak discloses conveying data over the LAN among the nodes in accordance with a first MAC protocol (Ethernet) characterized by a first latency, and preempting conveying the data in accordance with the first MAC protocol in order to pass a message over the LAN among the nodes using a second MAC protocol, having a second latency lower than the first latency. However, Shpak does not disclose that latency is controlled based on configuring one or more MAC interface devices using a plurality of priority control signals. In fact Shpak, similarly to Lane and Liang, does not disclose the use of any priority control signals, or controlling lateny based on priority control signals. Accordingly, the Appellant submits that claim 44 is allowable over the references cited in the Final Office Action at least for the above reasons. Claim 59 is substantially similar to claim 44 and is, therefore, also allowable based on the above reasoning.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 44 and 59.

III. Rejection of Dependent Claims 46 and 61

Claims 46 and 61 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 46 and 61 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 46 and 61.

IV. Rejection of Dependent Claims 54 and 69

Claims 54 and 69 depend on independent claims 42 and 57, respectively. Therefore, the Appellant submits that claims 54 and 69 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 42. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 54 and 69.

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CONCLUSION

For at least the foregoing reasons, the Appellant submits that claims 42-71 are in

condition for allowance. Reversal of the Examiner's rejection and issuance of a patent

on the application are therefore requested.

The Commissioner is hereby authorized to charge \$540 (to cover the Brief on

Appeal Fee) and any additional fees or credit any overpayment to the deposit account

of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: July 20, 2009

By: /Ognyan I. Beremski/

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CLAIMS APPENDIX (37 C.F.R. § 41.37(c)(1)(viii))

42. A method for communication, the method comprising:

in a chip comprising a plurality of wireless transmitter and/or receiver devices,

generating two or more priority signals to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices within said chip; and

coordinating communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals.

- 43. The method according to claim 42, comprising controlling throughput of one or more of said plurality of wireless transmitter and/or receiver via said configuration of said one or more of said corresponding MAC interface devices.
- 44. The method according to claim 42, comprising controlling latency associated with said communication of information via said configuration of said one or more of said corresponding MAC interface devices.
- 45. The method according to claim 42, comprising controlling connection time of one or more of said plurality of wireless transmitter and/or receiver via said configuration of said one or more of said corresponding MAC interface devices.
- 46. The method according to claim 42, comprising configuring one or more of said corresponding MAC interface devices via said generated one or more priority control signals via a wireless signal.

- 47. The method according to claim 42, comprising configuring one or more of said corresponding MAC interface devices via said generated one or more priority control signals via a host system.
- 48. The method according to claim 42, comprising coordinating said communication of information based on user input.
- 49. The method according to claim 42, comprising coordinating said communication of information based on detection of an active application.
- 50. The method according to claim 42, comprising coordinating said communication of information based on a protocol specific command.
- 51. The method according to claim 42, comprising assigning first and second priority control signals selected from said two or more priority control signals, to first and second wireless transmitter and/or receiver devices selected from said plurality of wireless transmitter and/or receiver devices.
- 52. The method according to claim 51, comprising receiving or transmitting data on said first of said plurality of wireless transmitter and/or receiver devices in accordance with the relative priority of said first priority control signal to said second priority control signal.
- 53. The method according to claim 51, wherein said first of said plurality of wireless transmitter and/or receiver devices comprises a WLAN wireless interface device, and wherein said second of said plurality of wireless transmitter and/or receiver devices comprises a Bluetooth wireless interface device.

- 54. The method according to claim 51, wherein said first of said plurality of wireless transmitter and/or receiver devices comprises a first Bluetooth wireless interface device, and wherein said second of said plurality of wireless transmitter and/or receiver devices comprises a second Bluetooth wireless interface device.
- 55. The method according to claim 51, wherein said first of said plurality of wireless transmitter and/or receiver devices is compliant with Bluetooth, and wherein said second of said plurality of wireless transmitter and/or receiver devices is compliant with IEEE 802.11(b) or IEEE 802.11(g).
- 56. The method according to claim 51, wherein said first priority control signal comprises a user-specified priority indication for said first of said plurality of wireless transmitter and/or receiver devices, such that said first of said plurality of wireless transmitter and/or receiver devices is given priority in the reception or transmission of data relative to said first of said plurality of wireless transmitter and/or receiver devices.

57. A system for communication, the system comprising:

at least one circuitry for use in a chip comprising a plurality of wireless transmitter and/or receiver devices, said at least one circuitry generates two or more priority signals to control prioritization of information between corresponding MAC interfaces for each of said plurality wireless transmitter and/or receiver devices within said chip; and

said at least one circuitry coordinates communication of information between two or more of said plurality of wireless transmitter and/or receiver devices by configuring one or more of said corresponding MAC interface devices via said generated two or more priority control signals.

58. The system according to claim 57, wherein said at least one circuitry controls throughput of one or more of said plurality of wireless transmitter and/or receiver via said configuration of said one or more of said corresponding MAC interface devices.

- 59. The system according to claim 57, wherein said at least one circuitry controls latency associated with said communication of information via said configuration of said one or more of said corresponding MAC interface devices.
- 60. The system according to claim 57, wherein said at least one circuitry controls connection time of one or more of said plurality of wireless transmitter and/or receiver via said configuration of said one or more of said corresponding MAC interface devices.
- 61. The system according to claim 57, wherein said at least one circuitry configures one or more of said corresponding MAC interface devices via said generated one or more priority control signals via a wireless signal.
- 62. The system according to claim 57, wherein said at least one circuitry configures one or more of said corresponding MAC interface devices via said generated one or more priority control signals via a host system.
- 63. The system according to claim 57, wherein said at least one circuitry coordinates said communication of information based on user input.
- 64. The system according to claim 57, wherein said at least one circuitry coordinates said communication of information based on detection of an active application.
- 65. The system according to claim 57, wherein said at least one circuitry coordinates said communication of information based on a protocol specific command.
- 66. The system according to claim 57, wherein said at least one circuitry assigns first and second priority control signals selected from said two or more priority control

signals, to first and second wireless transmitter and/or receiver devices selected from said plurality of wireless transmitter and/or receiver devices.

- 67. The system according to claim 66, wherein said at least one circuitry enables receiving or transmitting of data on said first of said plurality of wireless transmitter and/or receiver devices in accordance with the relative priority of said first priority control signal to said second priority control signal.
- 68. The system according to claim 66, wherein said first of said plurality of wireless transmitter and/or receiver devices comprises a WLAN wireless interface device, and wherein said second of said plurality of wireless transmitter and/or receiver devices comprises a Bluetooth wireless interface device.
- 69. The system according to claim 66, wherein said first of said plurality of wireless transmitter and/or receiver devices comprises a first Bluetooth wireless interface device, and wherein said second of said plurality of wireless transmitter and/or receiver devices comprises a second Bluetooth wireless interface device.
- 70. The system according to claim 66, wherein said first of said plurality of wireless transmitter and/or receiver devices is compliant with Bluetooth, and wherein said second of said plurality of wireless transmitter and/or receiver devices is compliant with IEEE 802.11(b) or IEEE 802.11(g).
- 71. The system according to claim 66, wherein said first priority control signal comprises a user-specified priority indication for said first of said plurality of wireless transmitter and/or receiver devices, such that said first of said plurality of wireless transmitter and/or receiver devices is given priority in the reception or transmission of data relative to said first of said plurality of wireless transmitter and/or receiver devices.

EVIDENCE APPENDIX (37 C.F.R. § 41.37(c)(1)(ix))

- (1) United States Patent No. 6,978,121 ("Lane"), entered into record by the Examiner in the September 21, 2006 Office Action.
- (2) United States Patent App. No. 2004/0029619 ("Liang"), entered into record by the Examiner in the October 5, 2007 Office Action.
- (3) United States Patent App. No. 2003/0161288 ("Unruh"), entered into record by the Examiner in the September 11, 2008 Office Action.
- (4) United States Patent No. 6,799,054 ("Shpak"), entered into record by the Examiner in the September 11, 2008 Office Action.
- (5) United States Patent App. No. 2004/0009751 ("Michaelis"), entered into record by the Examiner in the September 21, 2006 Office Action.

RELATED PROCEEDINGS APPENDIX (37 C.F.R. § 41.37(c)(1)(x))

The Appellant is unaware of any related appeals or interferences.